The stair climb power test (SCPT) is a test of lower body strength, power, balance.

**Patient Population**
A wide range of populations can perform the SCPT, including individuals who received a total joint arthroplasty, are pre- or post-operation, and older individuals that are community-dwelling or at risk for mobility limitations.

**Unit of Measure**
The SCPT is measured in power. Power is a function of force and velocity.

\[
\text{SCPT in Watts} = (\text{body weight in kg} \times 9.81) \times \left(\frac{\text{stair height in meters}}{\text{time in seconds}}\right)
\]

**Procedures**
Ascend the stairs as quickly as possible in a safe manner. The timer will start when the clinician says go and stops when both of the patient’s feet are on the final stair. The handrail can be used for balance and rest may be taken if needed, but the time continues.

**Equipment Needed**
- Set of 4, 10, or 11 stairs
- 20cm (8 inch) step height
- Handrail
- Adequate lighting
- No rugs/trip hazards in path
- Timer
- Gait belt
- Comfortable walking footwear for patient
- Time required: 2 minutes

**Safety**
Handrail and assistive device to be used when appropriate
Physical therapist can guard the patient during the test and should position themselves below the patient relative to the bottom of the stairs.

Sources: